

CLAIMS:

1. An overlock sewing machine, comprising:
 - a main body;
 - a needle bar mounted to reciprocate in an axial direction;
 - plural needles positioned at the needle bar;
 - a main feeding mechanism adjusted to control a cloth feeding amount of a main feed dog;
 - a differential feeding mechanism adjusted to control a cloth feeding amount of a differential feed dog;
 - a memorizing device configured to memorize at least one sewing pattern, the memorizing device being provided at the main body;
 - a pattern selecting device provided at the main body and configured to select the at least one sewing pattern memorized in the memorizing device; and
 - a control device provided at the main body and configured to control the selected at least one sewing pattern.
2. The overlock sewing machine according to claim 1, further comprising plural looper mechanisms.
3. The overlock sewing machine according to claim 1, further comprising:
 - a display device adjusted to display the selected at least one sewing pattern, the display device being provided at the overlock sewing machine main body.
4. The overlock sewing machine according to claim 3, wherein the memorizing device, the pattern select device, the control device, and the display device are housed in the main body.

5. The overlock sewing machine according to claim 4, wherein the at least one sewing pattern includes at least one of an over-edge chain stitch sewing pattern, a finishing pattern, and an intermittent gathering pattern.

6. The overlock sewing machine according to claim 5, wherein the selected at least one sewing pattern is changed to a second at least one sewing pattern when the selected at least one sewing pattern is in use.

7. The overlock sewing machine according to claim 6, wherein the intermittent gathering pattern is performed by repeatedly changing a feeding amount of the differential feed dog relative to a feeding amount of the main feed dog based on an intended number of stitches.

8. The overlock sewing machine according to claim 6, wherein the finishing pattern is performed by substantially simultaneously minimizing feeding amounts of the main feed dog and the differential feed dog based on an intended number of stitches.

9. The overlock sewing machine according to claim 6, wherein the pattern selecting device includes a first operating portion operated for initiating the intermittent gathering pattern, and a second operating portion operated for initiating the finishing pattern.

10. The overlock sewing machine according to claim 9, wherein the first operating portion includes a first operating switch configured to output a signal for initiating the

intermittent gathering pattern, and the second operating portion includes a second operating switch configured to output a signal for initiating the finishing pattern.

11. The overlock sewing machine according to claim 9, wherein the first and second operating portions are integrally provided with a third operating portion for performing the intermittent gathering pattern.

12. The overlock sewing machine according to claim 9, wherein the display device is configured to display the selected at least one pattern.

13. An overlock sewing machine, comprising:

a main body;

a needle bar mounted to reciprocate in an axial direction;

plural needles positioned at the needle bar;

a main feeding mechanism adjusted to control a cloth feeding amount of a main feed dog;

a differential feeding mechanism adjusted to control a cloth feeding amount of a differential feed dog;

a memorizing device configured to memorize at least one sewing pattern, the memorizing device being provided at the main body;

a pattern selecting device provided at the main body and configured to select the at least one sewing pattern memorized in the memorizing device or to select a manual operation; and

a control device provided at the main body and configured to control the selected at least one sewing pattern,

the at least one sewing pattern including an intermittent gathering pattern and a finishing pattern, the intermittent gathering pattern being performed by repeatedly changing a feeding amount of the differential feed dog relative to a feeding amount of the main feed dog based on an interval of an intended number of stitches, and the finishing pattern being performed by substantially simultaneously minimizing feeding amounts of the main feed dog and the differential feed dog based on an intended number of stitches.

14. The overlock sewing machine according to claim 13, wherein the at least one sewing pattern further includes an over-edge chain stitch pattern and a double-thread chain stitch.

15. The overlock sewing machine according to claim 14, wherein the pattern selecting device includes a first operating portion configured to initiate the intermittent gathering pattern, and a second operating portion configured to initiate the finishing pattern.

16. The overlock sewing machine according to claim 13, wherein the selected at least one sewing pattern is changed to a second at least one sewing pattern when the selected at least one sewing pattern is in use.

17. The overlock sewing machine according to claim 13, wherein the first operating portion includes a first operating switch configured to output a signal for performing the selected at least one pattern when the first operating switch is operated during the manual operation.

18. The overlock sewing machine according to claim 17, wherein the selected at least one pattern includes an intermittent gathering pattern.

19. The overlock sewing machine according to claim 17, wherein the second operating portion includes a second operating switch configured to output a signal for initiating a second at least one sewing pattern when the second operating switch is operated during the manual operation.

20. The overlock sewing machine according to claim 19, wherein the second at least one sewing pattern includes a finishing pattern.

21. The overlock sewing machine according to claim 19, wherein the first and second operating switches include a single member, and the single member is provided with a luminous portion configured to emit at least one light having at least one color.

22. The overlock sewing machine according to claim 21, wherein the luminous portion includes a light-emitting diode.

23. The overlock sewing machine according to claim 13, wherein the memorizing device, the pattern selecting device, the control device, and the display device are housed in the main body.

24. A method of changing a first sewing pattern to a second sewing pattern when the first sewing pattern is in use, the method comprising:

presenting at least one sewing pattern to a user;

recognizing selection of a first sewing pattern;
acknowledging the selection of the first sewing pattern to the user;
driving a motor for the sewing machine when operation of the sewing machine is required;
detecting selection of a second sewing pattern; and
transitioning to the second sewing pattern while the first sewing pattern is in use.

25. The method according to claim 24, wherein the first sewing pattern includes an intermittent gathering pattern and the second sewing pattern includes a finishing pattern.

26. An overlock sewing machine, comprising:
a main body;
a needle bar mounted to reciprocate in an axial direction;
plural needles positioned at the needle bar;
first means for controlling a cloth feeding amount of a main feed dog;
second means for controlling a cloth feeding amount of a differential feed dog;
means for memorizing at least one sewing pattern;
means for selecting the at least one sewing pattern or for selecting a manual operation;
means for displaying the selected at least one sewing pattern; and
means for controlling the selected at least one sewing pattern,
wherein the selected at least one sewing pattern is changed to a second sewing pattern during when the selected at least one program is in use.

27. The overlock sewing machine according to claim 26, wherein the first means for controlling includes the second means for controlling.

28. The overlock sewing machine according to claim 26, wherein the at least one sewing pattern includes at least one of an over-edge chain stitch sewing pattern, a finishing pattern, and an intermittent gathering pattern.

29. The overlock sewing machine according to claim 26, wherein the means for selecting the at least one sewing pattern includes first means for initiating the intermittent gathering pattern and second means for initiating the finishing pattern.

30. The overlock sewing machine according to claim 29, wherein the first means for initiating the intermittent gathering pattern includes a first switch for outputting a signal for initiating the intermittent gathering pattern, and the second means for initiating the finishing pattern includes a second switch for outputting a signal for initiating the finishing pattern.

31. The overlock sewing machine according to claim 30, wherein the first and second switches are integrally provided as a single member.

32. The overlock sewing machine according to claim 26, wherein the means for memorizing, the means for selecting, the means for controlling, and the means for displaying are substantially integrally provided at the main body.

33. The overlock sewing machine according to claim 28, wherein the single member includes means for emitting light to indicate a selected sewing pattern.